

LEARNING STRATEGIES AND EVALUATION TRAINING  
FOR  
FIELD CO-ORDINATOR AND RESOURCE PERSON  
FIELD CO-ORDINATOR AND RESOURCE PERSON ( 1985 AND 1986 GROUP) TRAINING

Study Team

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## Preface

This is an evaluation report of the Central Level Training of Learning Strategies and Learning Evaluation conducted for the field staff (FCs/RPs). It is the second of the 4-part evaluation-Preparation, Training of trainers, District training and Impact-intended to evaluate the process of training from concept to classroom implementation.

I hope the reports will provide valuable insights to the Project and MOEC on this key area of education-in-service training

I extend my thanks to Mr Michael Kiernan, Project Adviser PEP/UNICEF for educating us with his expertise, insights and comments in all phases of this study. My special thanks go to the Chief of PSTU for providing valuable suggestions for the study

I also acknowledge the help of the trainers of PSTU and PEP trainees extended to us in the course of the study.

Uddhab B. Karki  
Chief  
Evaluation Unit



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### Abbreviations Used

MOEC	--Ministry of Education and Culture
PEP	--Primary Education Project
PGTU	--Primary Supervision and Training Unit
PMU	--Primary Materials Unit
PEU	--Primary Evaluation Unit
T M	--Teaching Methodologies
ED.M.	--Educational Materials
L.S	--Learning Strategies
L E.	--Learning Evaluation
HM	--Headmaster
RP	--Resource Person
FC	--Field Co-ordinator



## 1. Introduction

### 1.1 Background

In response to the Basic Needs Teacher Training Programme, PEP developed two new training packages - Learning Strategies and Learning Evaluation, thus completing a 150 hr training for the teachers concerned. These packages were tried out in six RCs of the project districts to identify the effectiveness of the packages and to train the trainers of the PSTU. After field testing they were revised and edited on the basis of the experiences gained. Then the packages were produced to train field staff (FCs/RPs).

The field staff of the PEP were trained in the package at the central level by the PSTU trainers. These trainings were conducted for two groups of the Project (1985 and 1986). Altogether 60 field trainers received the trainings.

### 1.2 General Background of the Respondents

The FCs and RPs had already received trainings in a) Introduction to the PEP, b) Teaching Methodologies, c) School Management, d) Materials, and e) Supervision. Almost all of the trainees possess a Diploma or a Degree in Education and experience of teaching and/or administrative work. Also, the trainees have experience of the PEP implementation process.

In previous trainings, RPs tended to work in pairs: this practice has adversely effected the Supervision Programme. RPs were informed that in future only one RP would conduct a training but that he/she could have assistance from selected teachers from satellite schools. Therefor a RP, in preparing for the training, could work with 2 to 3 teachers and thereby share the training load. Resistance to the "One RP one training" idea is based on the prescription that there is too much work for one trainer over a 12-day period. The new approach stresses the role of a trainer as facilitator and puts the onus of work on the teachers themselves; secondly, a more systematic approach to training materials strengthens the self-instructional element, thus reducing the amount of work for the RP.

### 1.3 Objective of the Study

The objectives of this study are:

- to test the effectiveness of new training approach
- to identify the level of achievement of the trainees of the content of the packages

### 1.4 Rating Scale

A five point rating scale was used to evaluate the training. The scale ranges 1 (low) to 5 (high). This scale was used as indicated in box in terms of percentage and description .

<u>Scale</u>	<u>Percentage</u>	<u>Description</u>
1	1-20	no agreement
2	21-40	some agreement
3	41-60	average agreement
4	61-80	largely in agreement
5	81-100	total agreement

## 2. Summary of Findings and Recommendations

### 2.1 Pre- and Post Score

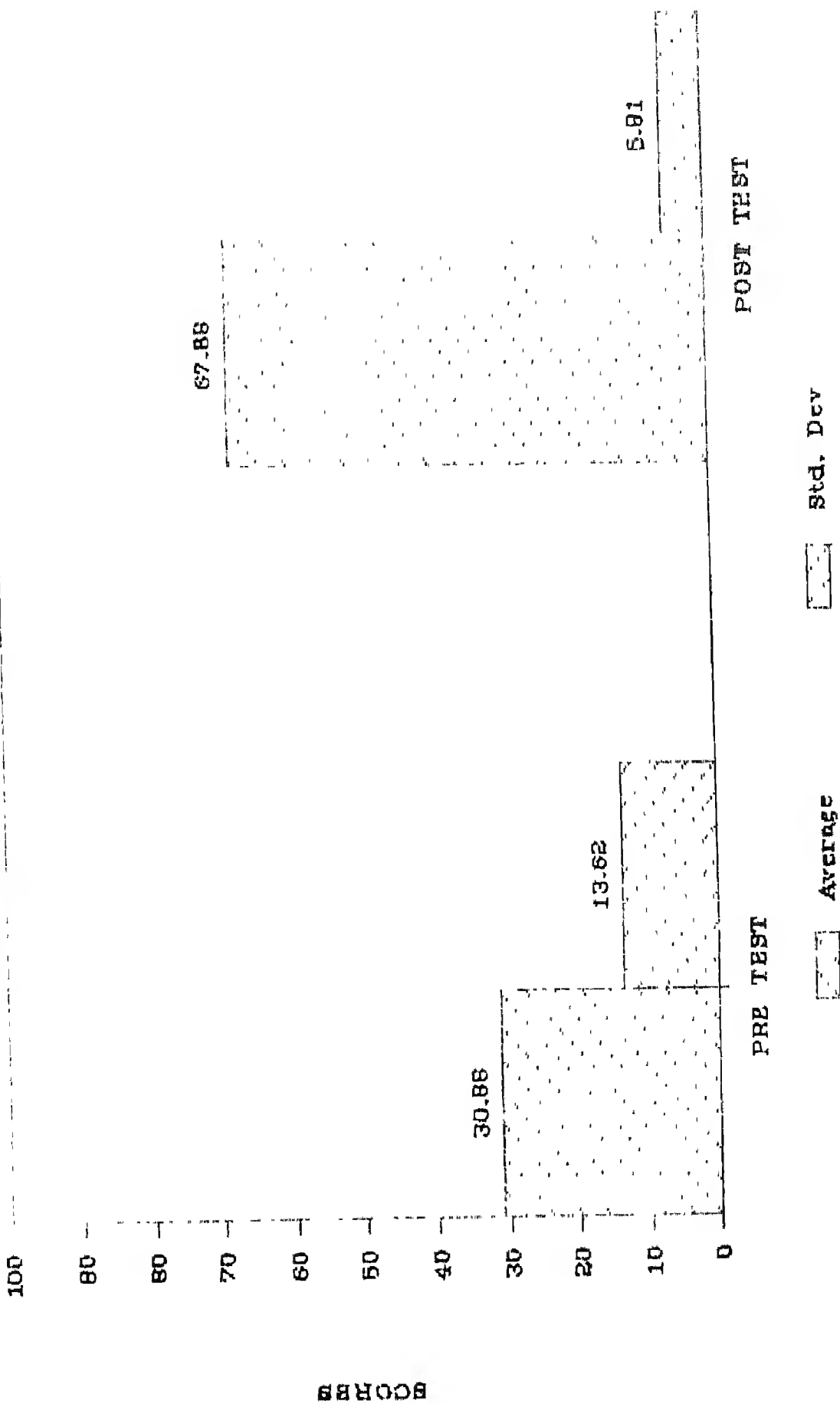
The average score of pre- and post test are 31 and 68 respectively. The variation of the scores between trainees in pre- test score higher than the post scores. The achievement score of the trainees is significant at 01 level of significance. Two issues arise from these findings : a) the surprising low level of professional knowledge of RPs and b) the effectiveness of the training insofar as raising their knowledge in the areas concerned (see Table below for details)

0  
1

Pre- and Post Test Score of the Trainees

S.No	Pre-Test Score N=33	Post Test Score N=33
1	60	81
2	56	70
3	52	79
4	50	76
5	50	76
6	48	74
7	44	72
8	44	72
9	40	72
10	36	72
11	36	72
12	34	70
13	34	70
14	33	70
15	33	70
16	33	68
17	28	68
18	28	68
19	27	68
20	27	66
21	26	66
22	25	66
23	20	64
24	20	64
25	18	64
26	18	64
27	17	62
28	16	62
29	15	62
30	14	60
31	14	60
32	12	56
33	11	56
Average	30.88	67.88
Std. Dev	13.62	5.91
Minimum	11.00	56.00
Maximum	60.00	81.00

# PRE AND POST TEST AVERAGE/STD-DEV SCORE



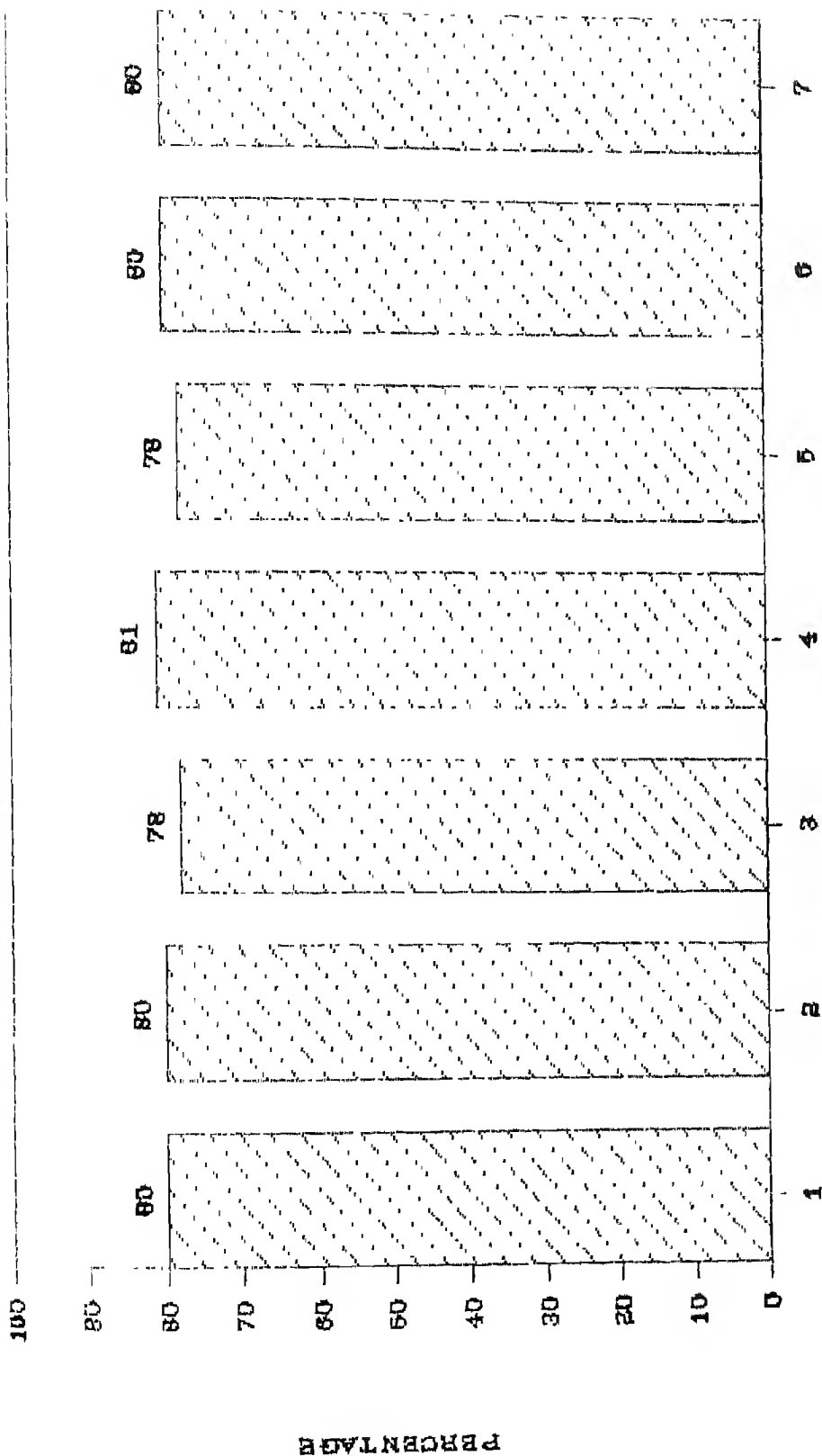
2.2. Grand Average Scores (combined Trainers and Trainees rating scores) on the Aspects of Training

<u>Aspects of Training</u>	<u>Grand Average Score</u> <u>(In percentage)</u>
1 Appropriateness of Contents	4.03(80)
2. Usefulness of Hand-outs	4.04(80)
3 Appropriateness of Methods/Activity	3.93(78)
4. Effectiveness of the Conduct of Training Sessions	4.06(81)
5. Opinion of FCs and RPs as to conducting this package at RCs	3.90(78)
6. New Knowledge and Ideas Gained	4.0(80)
7 Helpful to Improve Quality of Classroom Instruction	4.0(80)
Total	4.0(80)

2.3 The training conducted at central level has succeeded to a large extent. A study of the district level training will be done to determine the effect of the central level training, followed by a study of the impact of the series of trainings on the real target group classroom students.



# GRAND AVG SCORES ON TRAINING ASPECTS



## TRAINING ASPECTS (IN ABBREV)

1. APPROPRIATENESS OF CONTENTS
2. USEFULNESS OF HAND-OUTS
3. APPROPRIATENESS OF METHODS/ACTIVITY
4. EFFECTIVENESS OF THE CONDUCT OF TRAINING SESSIONS
5. OPINION OF THE FCS/RPS IN CONDUCTING THIS PACKAGE AT RCS
6. NEW KNOWLEDGE AND IDEAS GAINED
7. HELPFUL TO IMPROVE QUALITY OF CLASSROOM INSTRUCTION

## 2.4 Recommendations

- A. As the findings of the study indicate that the training has been largely successful , the training package and its modalities of operation should be retained and continued for the 1987 group of FCs and RPs.
- B The training materials for field-staff should be pre-tested by central staff themselves.
- C. The core of the training should be a thorough study and demonstration of the essential concepts involved. The principle must be that "a field staff member (FC/RP) should not expect a teacher to do what he/she (FC/RP) cannot demonstrate himself/herself".
- D. The proposed follow-up evaluations (district level and classroom impact) should be carried out using as large a sample as possible.
- E. All future trainings should , as far as possible , carry out pre and post tests.

## Annex-1

### Methodology

#### 1. Population

The population of this study was all the trainees (60), trainers (6) and programme developers.

#### 2. Sample

The RPs , FCs and trainers were the population of this study. 81 percent of the total were actually available for this study

#### 3 Procedures of Data Collection

In accordance with the objectives of the study, the following procedures were used to collect the data and information required for this study:

##### (i) Formal/Informal Discussion

Formal and Informal discussions were held with the trainers and trainees about the content of the package, methods of operation and achievement made from the training.

##### (ii) Interview

About 6 percent of the trainees were interviewed about the relevancy of the package and its method of operation.

##### (iii) Interview Schedule and Questionnaire for Trainers/Trainees

A questionnaire consisted of 15 items related to the all aspects training package was administered to the trainees and trainers to ascertain their perception towards the training package and its implementation.

(iv) Pre and Post Test

To test the knowledge of the trainees before and after participating in the training, a pre- and post test was developed focusing on the contents of the training package. The test development process and test matrix are as follows:

a. Test Development Process

1. The chief evaluator discussed with the Adviser and trainers of the PSTU about the number and types of items of Pre and Post test.
2. Each trainer developed a set of test items of the topic which they were responsible for. Then the evaluator discussed with them and finalised the test.
3. The Project Adviser looked at the test thoroughly and gave final shape to the test.
4. The evaluator and trainers developed the marking scheme.

b. Test matrix

Pre and Post test consists of 20 items representing comprehension and application knowledge level. The distribution of items were made according to the training aspects and contents. The details of the test is as below:

### Test Matrix

#### A. Learning Strategies

<u>Contents</u>	<u>Types Of Items</u> <u>Comprehension</u>	<u>And Quantity</u> <u>Application</u>	<u>Total</u> <u>Items</u>	<u>Total</u> <u>Marks</u>
1 Learning Activities	1	1	2	10
2. Learning and Memorization	1	1	2	10
3. Affective Domain	1	1	2	10
4. Concept Development	1	1	2	10
5 Visual Aids/Instructional Materials	1	1	2	10
Total	5	5	10	50

#### B. Learning Evaluation

<u>Contents</u>	<u>Types Of Items</u> <u>Comprehension</u>	<u>And Quantity</u> <u>Application</u>	<u>Total</u> <u>Items</u>	<u>Total</u> <u>Marks</u>
1. Evaluation and Examination	1	1	2	10
2 Measurement aspects	1	1	2	10
3. Test Matrix Objective , Weight and Balance	1	1	2	10
4. Types of Questions	1	1	2	10
5. Test Construction and Administration of Test	1	1	2	10
6. Scoring and analysis of answer sheets	1	1	2	10
Total	5	5	10	50

A. Learning Strategies 50

B. Learning Evaluation 50

Grand Total 100

#### 4. Data Analysis

The perceptions of the trainees and trainers were analyzed by providing scores which range from 1 (low) to 5 (high). And these were interpreted on the basis of grand average of the item.

The pre and post scores of the knowledge test were computed separately. The scores were analysed using t- test method.

Annex-2  
Description of the Training Package.

1. Training Package

This training package consisting of Learning Strategies and Evaluation was developed for teachers who had received the training in Teaching Methodology and Educational Materials. This package is in line the 'Basic Need Teacher Training Programme' which is intended to provide training of 150 hours.

2. Objectives

The objectives of this training packages are (i) to train the FCs/RPs in the contents and methods of Learning Strategies and Evaluation and (ii) to make FCs/RPs proficient in conducting the training of Learning Strategies and Evaluation for primary school teachers.

3. Contents

The contents and allocation of time of the training package were as below.

<u>a. Learning Strategies</u>	<u>Allocated Time (hours)</u>
1. Activity oriented learning	5.5
2. Learning and memorisation	5.5
3. Affective aspects of learning	5.5
4. Concept development	5.5
5. Visual aids and learning	5.5
6. Project Work (including Practice Teaching)	5.5
Total	38.5

<u>b. Learning Evaluation</u>	<u>Allocated Time (hours)</u>
1. Evaluation and examination	5.5
2. Measurement aspects	5.5
3. Test construction	5.5
4. Types of questions	5.5
5. Test administration	5.5
6. Project work (including Classroom Testing)	5.5
Total	38.5

#### 4 Training Methods

The following methods/techniques were used while conducting the training.

- (i) Diagnosis of problems : collections of information, demonstration and discussion
- (ii) Demonstration by trainers of key concepts and skill
- (iii) Preparation of activity oriented lessons by trainees (workshop)
- (iv) Presentation : as to prove mastery of essential concepts



### Annex-3

#### Interpretation

The means of the pre-test and post-test scores are 31 and 68 respectively. The achievement made by the trainees is significantly high at the 01 level of significance. It indicates that the trainees have increased their knowledge. As most of the questions (50%) were in the Application category, the active involvement of the trainees in the training activities and a sufficient amount of practical exercises contributed greatly to significant scores gain by the trainees.

The trainees (FCs/RPs) and trainers were largely in agreement with the appropriateness (80%) of contents of the training to develop the knowledge and skills of learning strategies. The evaluator's study also showed that the contents were to a large extent relevant to the current needs of the primary teachers (see Annex-4 and 4.1 for details).

The trainees (FCs/RPs) were largely in agreement (80%) with the usefulness of the hand-outs and the trainers also perceived (84%) that the hand-outs were largely helpful to conduct sessions. The evaluator noticed that these hand-outs had many examples and that matters were explained clearly. These are useful to the participants in grasping the contents of the trainings easily (see Annex-4 for details).

The trainers and trainees were largely in agreement with the appropriateness (78%) of the methods and techniques used to conduct the sessions. The evaluator observed that the methods and activities were participants oriented and there was an active participation of the trainees in each training session (See Annex 4 and 4.1 for details).

The trainers as well as the trainees had total agreement with effectiveness (81%) of the conduct of the training sessions in achieving the objectives of the training. The evaluator thought that the practical exercises and group work contributed to make the training sessions effective and useful (see Annex 4 and 4.1 for details).

6. The trainees were largely in agreement (78%) that they could become proficient in conducting the training of teachers in learning strategies and evaluation at RCs. This also matches the assessment of the trainers and evaluators. (see Annex-4 and 4.1 for details).
7. The trainers and trainees were in agreement (80%) that they gained new knowledge and skills in relation to "Learning Strategies and Learning Evaluation". The evaluator also confirmed this through discussion with the trainers and trainees (see Annex 4 and 4.1 for details).
8. The trainees and trainers agreed to a large extent (80%) that the training would help to improve the quality of classroom instruction. (see Annex 4 and 4.1 for details)

# ANNEX-4

## SUMMARY OF TABLES (1-16)

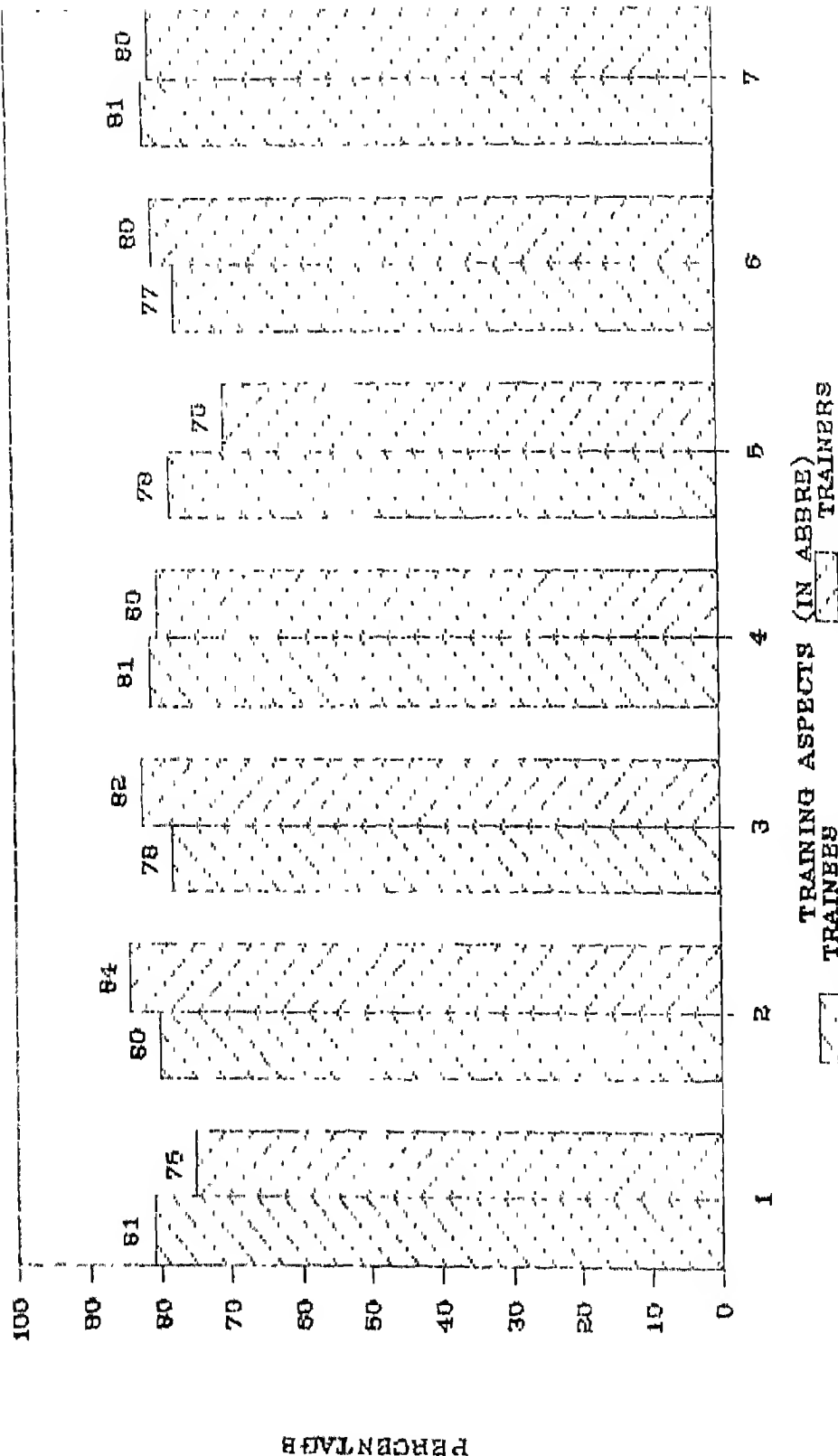
RATING SCORES ASSIGNED BY TRAINEES (FCS/RPs) AND TRAINERS ON THE ASPECTS OF THE LEARNING STRATEGIES AND EVALUATION TRAINING

ASPECTS OF TRAINING	AVERAGE SCORE		GRAND AVERAGE SCORE (%)
	TRAINEES SCORE (%) N=51	TRAINERS' SCORE (%) N=3	
1. APPROPRIATENESS OF CONTENTS	4.05(81)	3.77(75)	4.03(80)
2. USEFULNESS OF HAND-OUTS	4.03(80)	4.23(84)	4.04(80)
3. APPROPRIATENESS OF METHODS/ ACTIVITY	3.92(78)	4.12(82)	3.93(78)
4. EFFECTIVENESS OF THE CONDUCT OF TRAINING SESSIONS	4.06(81)	4.04(80)	4.06(81)
5. OPINION OF THE FCS/RPS IN CONDUCTING THIS PACKAGE AT RCS.	3.92(78)	3.5(70)	3.90(78)
6. NEW KNOWLEDGE AND IDEAS GAINED	3.85(77)	4.0(80)	3.84(77)
7. HELPFUL TO IMPROVE QUALITY OF CLASSROOM INSTRUCTION	4.05(81)	4.00(80)	4.0(80)
TOTAL	4.02(80)	4.00(80)	4.0(80)

Note: 1. Figures outside and inside the parentheses are average scores and percentage respectively

2. The tables 1-16 are kept in the files of the PEU . These can be made available in request if any body is interested in them.

RATING SCORES ASSIGNED BY TRAINEES (FCS/RPS) AND TRAINERS ON THE ASPECTS OF THE LEARNING STRATEGIES AND EVALUATION TRAINING



1. APPROPRIATENESS OF CONTENTS
2. USEFULNESS OF HAND-OUTS
3. APPROPRIATENESS OF METHODS/ACTIVITY
4. EFFECTIVENESS OF THE CONDUCT OF TRAINING SESSIONS
5. OPINION OF THE FCS/RPS IN CONDUCTING THIS PACKAGE AT RCS
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7. HELPFUL TO IMPROVE QUALITY OF CLASSROOM INSTRUCTION.

ANNEX-4.1

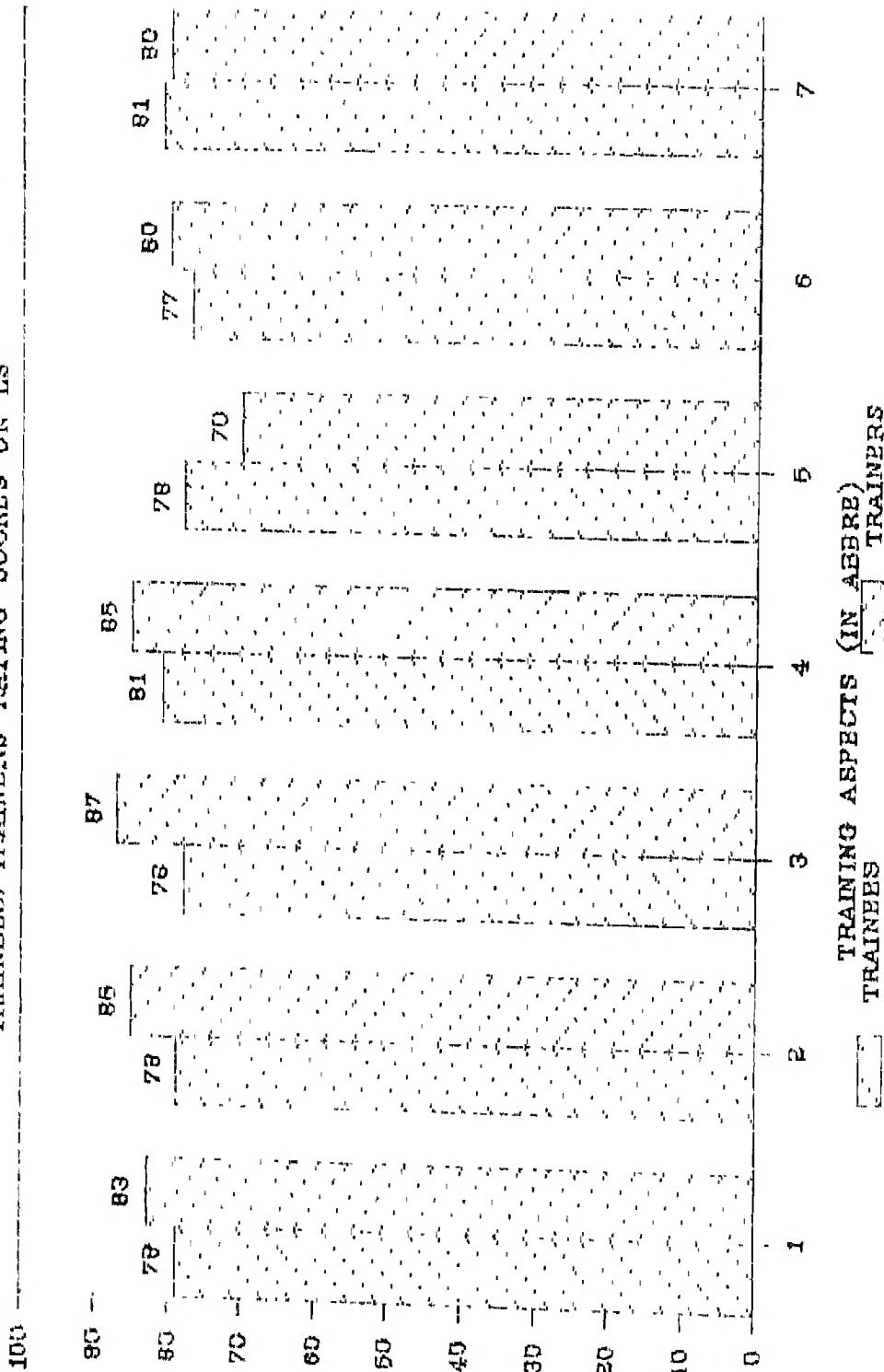
## A SUMMARY OF TABLES (1-8)

## RATING SCORES ASSIGNED BY TRAINEES (FCS/RPS) AND TRAINERS ON THE ASPECTS OF LEARNING STRATEGIES

ASPECTS OF TRAINING	AVERAGE SCORE		GRAND AVERAGE SCORE (%)
	TRAINEES SCORE (%) N=51	TRAINERS' SCORE (%) N=3	
1. APPROPRIATENESS OF CONTENTS	3.94(79)	4.16(83)	3.95(79)
2. USEFULNESS OF HAND-OUTS	3.94(79)	4.27(85)	3.95(79)
3. APPROPRIATENESS OF METHODS/ ACTIVITY	3.93(78)	4.37(87)	3.95(79)
4. EFFECTIVENESS OF THE CONDUCT OF TRAINING SESSIONS	4.06(81)	4.28(85)	4.07(81)
5. OPINION OF THE FCS/RPS IN CONDUCTING THIS PACKAGE AT RCS.	3.91(78)	3.5(70)	3.89(77)
6. NEW KNOWLEDGE AND IDEAS GAINED	3.85(77)	4.0(80)	3.82(76)
7. HELPFUL TO IMPROVE QUALITY OF CLASSROOM INSTRUCTION	4.05(81)	4.0(80)	4.0(80)
TOTAL	3.97(83)	4.25(85)	3.98(79)

Note: 1. Figures outside and inside the parentheses are average scores and percentage respectively.

# TRAINEES/TRAINERS RATING SCORES ON LS



1. APPROPRIATENESS OF CONTENTS
2. USEFULNESS OF HAND-OUTS
3. APPROPRIATENESS OF METHODS/ACTIVITY
4. EFFECTIVENESS OF THE CONDUCT OF TRAINING SESSIONS
5. OPINION OF THE FCS/RPS IN CONDUCTING THIS PACKAGE AT PIS
6. NEW KNOWLEDGE AND IDEAS GAINED
7. HELPFUL TO IMPROVE QUALITY OF CLASSROOM INSTRUCTION

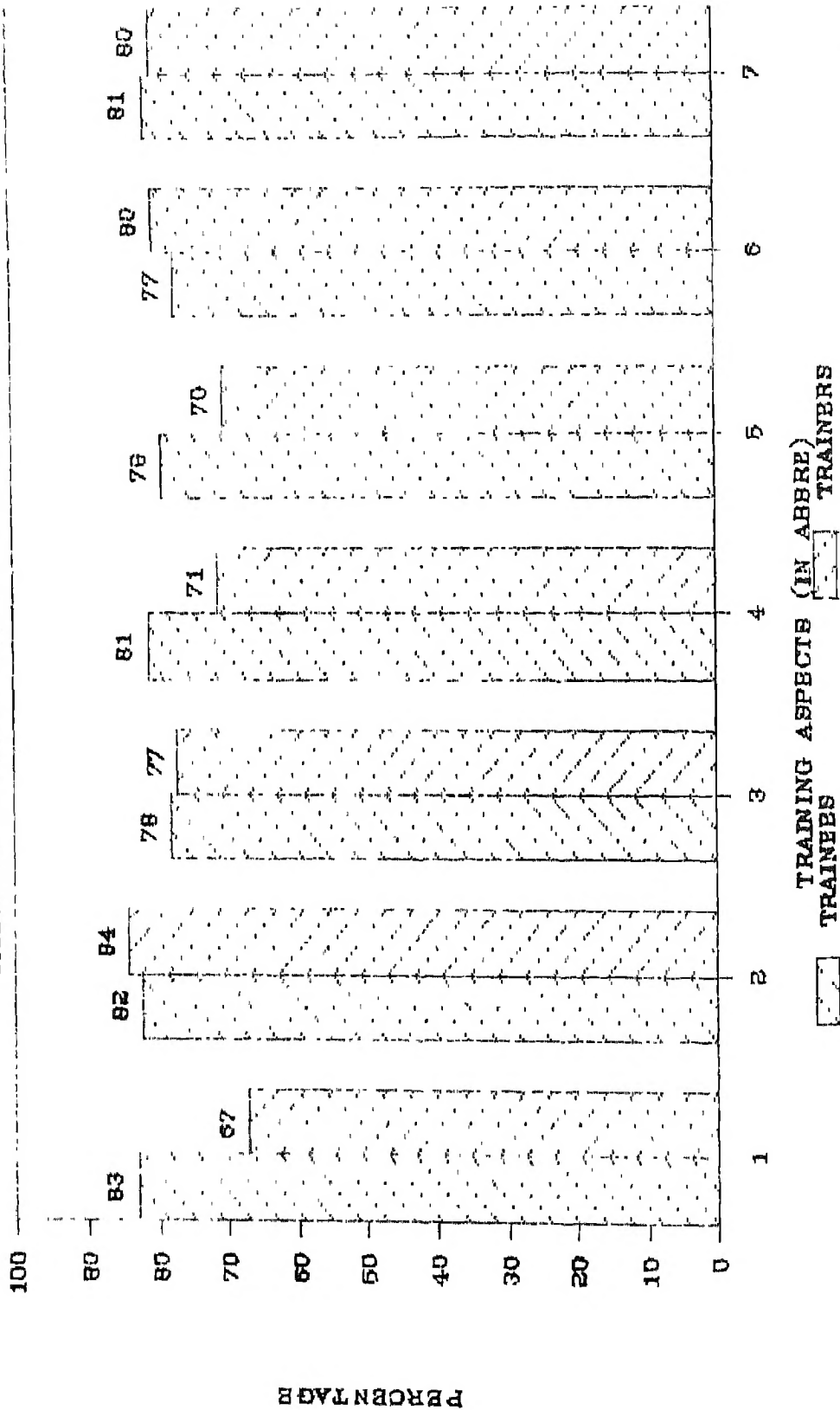
B. SUMMARY OF TABLES (9-16)

RATING SCORES ASSIGNED BY TRAINEES (FCS/RPS) AND TRAINERS ON THE ASPECTS OF LEARNING EVALUATION

ASPECTS OF TRAINING SCORE	TRAINEES SCORE (%)	AVERAGE SCORE	GRAND AVERAGE
	N=51		(%)
1. APPROPRIATENESS OF CONTENTS	4.18(83)	N=3 3.38(67)	N=54 4.12(82)
2. USEFULNESS OF HAND-OUTS	4.13(82)	4.2(84))	4.13(82)
3. APPROPRIATENESS OF METHODS/ ACTIVITY	3.91(78)	3.87(77)	3.91(78)
4. EFFECTIVENESS OF THE CONDUCT OF TRAINING SESSIONS	4.06(81)	3.57(71)	4.04(78)
5. OPINION OF THE FCS/RPS IN CONDUCTING THIS PACKAGE AT RCS.	3.93(79)	3.5(70)	3.91(77)
6. NEW KNOWLEDGE AND IDEAS GAINED	3.85(77)	4.0(80)	3.86(77)
7. HELPFUL TO IMPROVE QUALITY OF CLASSROOM INSTRUCTION	4.10(81)	4.0(80))	4.09(82)
TOTAL	4.07(81)	3.79(76)	4.02(80)

Note: 1. Figures outside and inside the parentheses are average scores and percentage respectively.

TRAINEES/TRAINERS RATING SCORES ON LE



1. APPROPRIATENESS OF CONTENTS
2. USEFULNESS OF HAND-OUTS
3. APPROPRIATENESS OF METHODS/ACTIVITY
4. EFFECTIVENESS OF THE CONDUCT OF TRAINING SESSIONS
5. OPINION OF THE FCS/RPS IN CONDUCTING THIS PACKAGE AT RCS
6. NEW KNOWLEDGE AND IDEAS GAINED
7. HELPFUL TO IMPROVE QUALITY OF



Annex-5

Participants

The participants of this training were FCs and RPs of 1985 and 1986 groups. Altogether 60 field staff participated in this training representing six project districts. The table below shows the details of the participants:

<u>District</u>	<u>FC</u>	<u>1985 RP</u>	<u>Group Total</u>	<u>1986 Group RPs</u>	<u>Total</u>	<u>Percentage</u>
Jhapa	3	6	9	5	14	23
Dhankuta	1	3	4	4	8	13
Tanahu	2	4	6	4	10	17
Kaski	3	5	8	5	13	22
Dang	2	4	6	4	10	19
Surkhet	1	2	3	2	5	8
Total	12	24	36	24	60	100